# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A13NM Revision 15 Bombardier DHC-8-100 Series DHC-8-200 Series DHC-8-300 Series DHC-8-400 Series

December 27, 2006

#### TYPE CERTIFICATE DATA SHEET NO. A13NM

This data sheet which is a part of Type Certificate No. A13NM, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Bombardier Inc.

123 Garratt Boulevard Downsview, Ontario Canada M3K 1Y5

## **1. DHC-8-100 Series** (see Note 5)

Model -101 - Approved Dec. 11, 1984, by the FAA and Sept. 28, 1984, by the Canadian Department of Transport

Model -102 - Approved Aug. 7, 1986, by the FAA and June. 12, 1986, by the Canadian Department of Transport

Model -103 - Approved Nov. 30, 1988, by the FAA and July. 20, 1987, by the Canadian Department of Transport

Model -106 - Approved Dec. 10, 1993, by the FAA and Nov. 20, 1992, by the Canadian Department of Transport

#### Data Pertinent to all Models Except as Indicated

Engines 2-Pratt & Whitney Canada, Inc., PW120 or PW120A (-101) 2-Pratt & Whitney Canada, Inc., PW120A or PW121 (-102)

2-Pratt & Whitney Canada, Inc., PW120A or PW121 (-103)
2-Pratt & Whitney Canada, Inc., PW121 (-106)
(See Data Pertinent to All Models Except as Indicated)

Fuel ASTM D1655 Jet A, Jet A1, Jet B and MIL-T-5624 JP-4 & JP-5, JP-8 conforming to

Pratt and Whitney Canada, Inc. Specification No. CPW 204

Oils conforming to Pratt and Whitney Canada, Inc.

Specification No. PWA 521 Type II (MIL-L-23699).

Engine Limits See AFM as listed under Approved Publications

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Rev. No.	13	15	14	14	13	13	15	13	13	11	11	11	11

Propeller and Propeller Limits 2-Hamilton Standard Model 14SF-7
---

Blade SFA13()-0A Diameter 3.96M (13 Ft)

Pitch settings at 0.75 radius:

77.5° Feather Flight fine 10.5° -5.5° Ground fine Full reverse -18.5°

Propeller (Np) -Takeoff 1212 r.p.m.

Max Continuous 1212 r.p.m.

(See Data Pertinent to All Models Except as Indicated)

		0 . 14000 6	Knots	<u>m.p.h.</u>
Airspeed Limits	V <sub>MO</sub> (Maximum operating)	0 to 14000 ft	242	279
(IAS)		15000 ft	239	275
		20000 ft	223	257
		25000 ft	207	238
	V <sub>FF</sub> (Flaps extended)	Flaps 50	148	170
		Flaps 15 <sup>0</sup>	148	170
		Flaps 35 <sup>o</sup>	130	150
	V <sub>A</sub> (Maneuvering) (-101, -102, -	103)	163	188
	V <sub>A</sub> (Maneuvering)(-106)	/	164	189
	V <sub>LO</sub> (Landing gear operation)		158	182
	V <sub>LE</sub> (Landing gear extended)		172	198
	V <sub>B</sub> (Rough Air)		180	207
	Landing Gear Doors Open Opera	tive	140	161
	Speed (Max. speed for operation			
	following an alternate	landing gear		
	extension)			
	V <sub>MCA</sub> (Minimum control speed)	Flaps 50	79	91
	WCA \ 1 /	15 <sup>0</sup>	75	86
Maximum Weight	DHC-8-101	Take-off weight 14	.970 kg (33.0	000 lb)
(Mass)	DHC-8-102	Take-off weight 15	_	
<u>, , , , , , , , , , , , , , , , , , , </u>	DHC-8-103	Take-off weight 15	_	
			,966 kg (35,2	
		(With MODSUM 8Q42	_	
	DHC-8-106	Take-off weight 16	-	
	(For other weights se	e AFM as listed under A	pproved Publ	ications)
CG Limits	See AFM as listed un	der Approved Publicatio	ns	
14 ' D	4541 (1000 11) (9	W. 1. 1. 1. 1. 1.	1.6	

Maximum Baggage

454 kg (1000 lb) (See Weight and Balance Manual for mixed passenger cargo configuration) 907 kg (2000 lb) with Mod 8/0063 or 8/0083

Page 3 of 13 A13NM

#### 2. **DHC-8-200 Series**

Model -201 - Approved January 4, 1996, by the FAA and August\_24, 1995, by the Canadian Department of Transport Model -202 - Approved April 19, 1995, by the FAA and March 9, 1995, by the Canadian Department of Transport

Engines 2-Pratt & Whitney Canada, Inc., PW123C (201)

2-Pratt & Whitney Canada, Inc., PW123D (202) (See Data Pertinent to All Models Except as Indicated)

Fuel ASTM D1655 Jet A, Jet A1, Jet B and MIL-T-5624 JP-4 & JP-5 conforming to

Pratt and Whitney Canada, Inc. Specification No. CPW 204

Oil Oils conforming to Pratt and Whitney Canada, Inc. Specification No. PWA 521

Type II (MIL-L-23699).

Engine Limits See AFM as listed under Approved Publications

<u>Propeller and Propeller Limits</u> 2-Hamilton Standard Model 14SF-23

Blade SFA13()-0A Diameter 3.96M (13 Ft) Pitch settings at 0.75 radius:

Feather  $77.5^{\circ}$ Flight fine  $10.5^{\circ}$ Ground fine  $-5.5^{\circ}$ Full reverse  $-18.5^{\circ}$ 

Propeller (Np) - Takeoff 1212 r.p.m.

Max Continuous 1212 r.p.m.

(See Data Pertinent to All Models Except as Indicated)

				<u>Knots</u>	<u>m.p.h.</u>
Airspeed Limits	V <sub>MO</sub> (Maximum operating)	0 to 14000	) ft	242	279
(IAS)		1500	0 ft	239	275
		2000	0 ft	223	257
		2500	0 ft	207	238
	V <sub>EE</sub> (Flaps extended)	Flaps	50	148	170
	12 -	Flaps	15 <sup>o</sup>	148	170
		Flaps	35°	130	150
	V <sub>Δ</sub> (Maneuvering)			164	188
	V <sub>LO</sub> (Landing gear operation)			158	182
	V <sub>LE</sub> (Landing gear extended)			172	198
	V <sub>R</sub> (Rough Air)			180	207
	Landing Gear Doors Open Operative			140	161
	Speed (Max. speed for operation				
	following an alternate landi	ng gear exte	ension)		
	V <sub>MCA</sub> (Minimum control speed)	Flaps	5 <sup>o</sup>	80	91
	HICH I	•	15 <sup>o</sup>	74	86

Maximum Weight (Mass) All Models, Take-off weight 16,466 kg (36,300 lb)

(For other weights see AFM as listed under Approved Publications)

CG Limits See AFM as listed under Approved Publications

Maximum Baggage 907 kg (2000 lb) (See Weight and Balance Manual for mixed passenger cargo

configuration)

## 3. **DHC-8-300 Series**

Model -301-	Approved June 8, 1989, by the FAA and Feb. 14, 1989, by the Canadian Department of
	Transport
Model -311-	Approved September 14, 1990, by the FAA and July 31, 1990, by the Canadian
	Department of Transport
Model -315-	Approved June 28, 1995, by the FAA and June 2, 1995, by the Canadian Department of
	Transport

**Engines** 2-Pratt & Whitney Canada, Inc., PW123 (-301 and -311) 2-Pratt & Whitney Canada, Inc., PW123E (-315) (See Data Pertinent to All Models Except as Indicated)

<u>Fuel</u> ASTM D1655 Jet A, Jet A1, Jet B, and MIL-T-5624 JP-4 & JP-5 conforming to

Pratt and Whitney Canada, Inc. Specification No. CPW 204

<u>Oil</u> Oils conforming to Pratt and Whitney Canada, Inc. Specification No. PWA 521

Type II (MIL-L-23699).

**Engine Limits** See AFM as listed under Approved Publications

Propeller and 2-Hamilton Standard Model 14SF-15 or 14SF-23

Blade

Propeller Limits

Diameter 3.96M (13 Ft)

Pitch settings at 0.75 radius:

Feather 77.5° Flight fine 11.5° -7.5° Ground fine -18.5° Full reverse

Propeller (Np) -Takeoff 1212 r.p.m. Max Continuous 1212 r.p.m.

SFA13 ()-0A

(See Data Pertinent to All Models Except as Indicated)

Airspeed Limits (IAS)	V <sub>MO</sub> (Maximum operating)	0 to 17000 ft 20000 ft 25000 ft	<u>Knots</u> 243 232 214	m.p.h. 280 267 246
	DHC-8-301 V <sub>FE</sub> (Flaps extended)	Flaps 50 Flaps 100 Flaps 150 Flaps 350	160 149 149 127	184 171 171 155
	$egin{aligned} V_A & (Maneuvering) \\ V_{LO} & (Landing gear operation) \\ V_{LE} & (Landing gear extended) \\ V_B & (Rough Air) \end{aligned}$		176 158 173 188	203 182 199 216

Page 5 of 13 A13NM

	1 480 0 01 10				11101111
3. DHC-8-300 Seri	es (cont'd				
<u> </u>	es (cont d			Knots	<u>m.p.h.</u>
	Landing Gear Doors Open Operative			140	161
	Speed (Max. speed for operation			1.0	101
	following an alternate landing	gear exte	nsion)		
	V <sub>MCA</sub> (Minimum control speed)	Flaps	5Ó	83	96
	MCA \	Flaps	15 <sup>o</sup>	78	89
	DHC-8-311 and 315				
	V <sub>FF</sub> (Flaps extended)	Flaps	5 <sup>0</sup>	163	187
		Flaps 1	$10^{\circ}$	154	177
		Flaps 1	15 <sup>0</sup>	150	173
		Flaps 3	35 <sup>0</sup>	138	159
	V <sub>A</sub> (Maneuvering)			177	204
	V <sub>LO</sub> (Landing gear operation)			163	187
	V <sub>LE</sub> (Landing gear extended)			173	199
	V <sub>B</sub> (Rough Air)			190	219
	Landing Gear Doors Open Operative			140	161
	Speed (Max. speed for operation following an alternate landing extension)	gear			
	V <sub>MCA</sub> (Minimum control speed)	Elopo	15 <sup>0</sup>	78	90
	V <sub>MCA</sub> (William control speed)	Flaps Flaps	10 <sup>0</sup>	80	90 92
		Flaps	50	83	95
		Flaps	0o	94	109
Maximum Weight	DHC-8-301	- -	Γake-off	weight 18,643	3 kg (41,100 lb)
(Mass)	DHC-8-311 and 315			weight 18,643	3 kg (41,100 lb) 7 kg (41,880 lb)
			(with C		1 incorporated)
					kg (43,000 lb)
			(with C		2 incorporated)
	(For other weights see AFM	as listed u	under Ap	proved Public	ations)
CG Limits	See AFM as listed under Ap	proved Pu	ıblication	s	
Maximum Baggage	1,130 kg (2500 lb) for stand Manual for other configuration		ge compa	artment (See V	Veight and Balance

All cargo, 20, 40 or 48 passenger configurations with a moveable passenger/cargo bulkhead located at station 197.0, 354.0, 515.0 or 579.0 respectively

Cargo/Combi

(DHC-8-311)

## 4. DHC-8-400 Series

'	Model 400	Approv	ad January 26, 2000, by the EAA ar	od July 30, 1000 l	w the Canadian De	anartment	
		of Trans	Approved January 26, 2000 by the FAA and July 30, 1999 by the Canadian Department of Transport				
	Model 401		Approved January 26, 2000 by the FAA and August 3, 1999 by the Canadian Department of Transport				
	Model 402	Approv	Approved January 26, 2000 by the FAA and August 4, 1999 by the Canadian Department of Transport				
	Engines		& Whitney Aircraft of Canada engir -400, 401 and 402 PW150				
	Fuel	ASTM :	ne Type: D1655 JET A, ASTM D1655 JET A 5624 JP-5, MIL-T-5624 JP-8	A1			
			ut Type: D1655 JET B, MIL-T-5624 JP-4				
		conforn	ning to Pratt & Whitney Canada, Inc	c. Specification N	To. CPW 204		
	Oil	Oils cor Publicat	nforming to specification MIL-L-23 tions.)	699 (See AFM as	s listed in Approve	d	
	Engine Limits Propeller and Propeller Limits		See AFM as listed in Approved Pu Dowty Aerospace Model R408/6-				
			Blade Diameter	4.11 M	I (13.5 ft.) nominal	I	
			Pitch setting at 0.75 radius: Feather Flight fine (Electronic) Flight fine (Hydraulic) Ground fine Full reverse  Propeller (NP) - Take-off	84.5° 16.5° 16.0° -3.5° -19.0°			
			Max. continuous	1020 r			
Airspee (IAS)	d Limits	$V_{MO}$	(Maximum Operating) 0 to	8,000 ft 10,000 ft 18,000 ft 20,000 ft 25,000 ft	Knots 245 282 286 275 248	m.p.h 282 325 329 316 285	
		V <sub>FE</sub> (Fla	aps extended)	Flap 5° Flap 10° Flap 15° Flap 35°	200 181 172 158	230 208 198 182	

Page 7 of 13 A13NM

$V_{\rm A}$ (Maneuvering) $V_{\rm LO}$ (Landing gear operation) $V_{\rm LE}$ (Landing gear extended) $V_{\rm B}$ (Rough Air) $Landing \ Gear \ Door \ Open \ Operative \ Speed$ (Max. Speed for operation following an alternate		204 200 215 210 185	235 230 247 242 213
landing gear extension) $V_{\text{MCA}}$ (Minimum control speed)	Flap 15°	91	105
	Flap 10°	95	109
	Flap 5°	98	113
	Flap 0°	113	130

(Refer to AFM for airspeed limits)

Maximum Weight Take-off weight:

Models 400, 401 and 402

 (With Modsum 4-201539 incorporated)
 27,987 Kg
 (61,700 lb)

 (With Modsum 4-308807 incorporated)
 28,998 Kg
 (63,930 lb)

 (With Modsum 4-308907 incorporated)
 29,257 Kg
 (64,500 lb)

 (With Modsum 4-309238 incorporated)
 29,574 Kg
 (65,200 lb)

C.G. Limits See AFM as listed in Approved Publications.

Maximum Baggage For standard baggage compartments

Aft baggage compartment: 1669 Kg (3680 lb) Fwd baggage compartment: 413 Kg (910 lb)

See Weight and Balance Manual for other configurations

## DATA PERTINENT TO ALL MODELS EXCEPT AS INDICATED:

## Series 100, 200 and 300:

Propeller and Propeller Limits

The following Hamilton Standard Propeller combinations are approved.

Basic Aircraft					
Model	Models	Models	Models		
101	102, 103 & 106	201 & 202	301, 311, & 315		
14SF-7 & -7	14SF-7 & -7	14SF-23 & -23	14SF-15 & 15		
			14SF-23 & -23		

Modification 8/2579 allows the following additional Hamilton Standard Propeller combinations.

Models 102, 103, & 106	Models 201 & 202	Models 301, 311, & 315
14SF-15 & 14SF-15	14SF-15 & 14SF-15	14SF-15 & 14SF-23
14SF-15 & 14SF-7	14SF-15 & 14SF-23	
14SF-15 & 14SF-23		
14SF-23 & 14SF-23		
14SF-23 & 14SF-7		

Engines The following Pratt & Whitney Aircraft of Canada engine combinations are approved.

Any combination of original engines and/or optional engines within each aircraft model is permitted. For series 200 and 300 aircraft, optional engines must incorporate

modification 8/2735

Approved Engine Combinations				
Aircraft Model	Original Engine	Optional Engine		
102	PW120A	PW121		
201	PW123C	PW123		
		PW123B		
		PW123D		
		PW123E		
202	PW123D	PW123		
		PW123B		
		PW123E		
301 and 311	PW123	PW123B		
		PW123E		

The following P&WC Service Bulletin matrix lists the service bulletins which must be incorporated to change an optional engine to the rating of an original engine. The cancelling derate service bulletin is also shown.

P&WC Service Bulletin Matrix						
Optional Engine	Original Engine	P&WC S.B.	P&WC S.B.			
	Rating	Derate	Cancel Derate			
PW123	PW123C	21501	21502			
	PW123D					
	PW123					
PW123B	PW123C	21499	21500			
	PW123D					
PW123D	PW123C	21503	21504			
	PW123					
PW123E	PW123C	21497	21498			
	PW123D					

## Reference Datum

(Series 100, 200, 300) Plate located on centerline at Station 423.0 in. (1074.4 cm) on underside of

fuselage.

(Series 400) Plate located on centerline at "Station 428.0 in" (1087.1 cm) on underside of

fuselage.

<u>Leveling Means</u> Plum bob and target in RH emergency exit opening.

Minimum Crew 2 (Pilot and Copilot)

Maximum Series 100 and 200

Occupants Not to exceed 44, including 2 pilots, 1 attendants and 1 check pilot (40

passengers when fitted with an approved interior)

Series 300

Not to exceed 61, including 2 pilots, 2 attendants and 1 check pilot

(56 passengers when fitted with an approved interior)

Page 9 of 13 A13NM

$\alpha$		40	$\sim$
€.	eries	7111	"
N	CIICS	+v	v

Model 400:

Not to exceed 74, including 2 pilots, maximum 3 attendants, minimum 2 attendants and 1 check pilot (68 passengers when fitted with an approved interior)

Model 401:

Not to exceed 76, including 2 pilots, maximum 3 attendants, minimum 2 attendants and 1 check pilot (70 passengers when fitted with an approved interior)

Model 402:

Not to exceed 84, including 2 pilots, maximum 3 attendants, minimum 2 attendants and 1 check pilot (78 passengers when fitted with an approved interior)

Flight Load Factors	Flaps Up Flaps extended	+2.5g; +2.0g;				
<u>Fuel Capacity</u> (Series 100, 200, 300)	Usable Unusable Total	<u>kg</u> 2575 40 2615	<u>lb</u> 5678 87 5765	<u>US Gal</u> 835 13 848	Imp Gal 695 11 706	
(Series 400)	Usable Unusable Total	5318 73 5391	11724 160 11884	1724 24 1748	1436 20 1456	
Oil Capacity				US Gal	Imp Gal	
Per Engine	PW120/120A/121		Usable Total	1.0 4.7	0.83 3.9	
	PW123/123B/123E		Usable Total	1.9 5.5	1.6 4.57	
(Series 400)	PW150A		Usable Total	1.48 6.58	1.23 5.48	
Maximum Operating Altitude	Take-off and landing Enroute	10,000 feet 25,000 feet				
Outside Air Temperature Limits	See AFM, as listed under Approved Publications					
Control Surface	See Maintenance Manu	S	Series 100 PSM Series 200 PSM Series 300 PSM Series 400 PSM	1-82-2 1-83-2		

**Import Eligibility** 

A U.S Airworthiness certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by the Minister of Transport. This form must contain the following statement: "This certifies that the aircraft described above has been manufactured in conformity with the data forming the basis for the DOT Aircraft Type Approval No. A-142 as modified in accordance with the requirements for U.S. registered airplanes FAA Type Certificate No. A13NM defined in AEROC 8.1.AC.1."

#### Certification Basis

#### Series 100, 200 and 300:

FAR Part 25 dated February 1, 1965 including Amendments 25-1 through 25-51; FAR 25.832, Amendment 25-56; FAR 36 dated December 1, 1969 including Amendments 36-1 through 36-12; SFAR 27 dated December 12, 1973 including Amendments 27-1 through 27-5.

Application for Type Certificate: March 31, 1980 (Series 100)

## Series 200 Additional Requirements:

FAR Part 25, Amendments 25-52 through 25-66; FAR 25.963(e), Amendment 25-69; FAR 25.361, Amendment 25-72; FAR 25.729(e), Amendment 25-75; FAR Part 34 dated September 10, 1990 (Replaces SFAR 27); FAR Part 36, Amendments 36-1 through 36-20

With the following exceptions (See Note 6)

FAR 25.365(e), Amendment 25-54; FAR 25.561, Amendment 25-64;

FAR 25.562, Amendment 25-64; FAR 25.783, Amendment 25-54;

FAR 25.785, Amendment 25-64; FAR 25.904, Amendment 25-62;

FAR 25.1091(e), Amendment 25-57

## Series 300 Additional Requirements:

All Models:

FAR 25.812, Amendment 25-58

DHC-8-301:

FAR 25.853, Amendment 25-59

DHC-8-311 and 315;

FAR 25.853, Amendment 25-66

DHC-8-315;

FAR Part 34 dated September 10, 1990 (Replaces SFAR 27); FAR Part 36, Amendments 36-1 through 36-20

## Series 100, 200 and 300

#### **Items of Equivalent Safety**

- 1. Pilot compartment view FAR 25.773(b)(2).
- 2. Ditching emergency exits FAR 25.807(d)(2) Amdt. 25-55. (DHC-8-311 and 315 with CR803SO00001 or CR803SO00002 incorporated)
- Cargo compartment classification FAR 25.857(b)&(d) Amdt. 25-60, for the 20, 40 & 48 passenger configurations. DHC-8-311 Flight Manual Suppl. 42, Iss. 3, Cargo Loading Manual PSM 1-83-8A, Suppl. 1, Iss. 3 and Weight & Balance Manual PSM 1-83-8C are required. (S/N 230 & 242)

## **Special Conditions**

1. Automatic take-off power control system (ATPCS) (ref. FAA Special Conditions No. 25.-ANM-3).

Page 11 of 13 A13NM

#### Exemptions

- 1. FAR 25.571(e)(2) Propeller Debris (ref. FAA exemption No. NM-102)
- 2. FAR 25.807(c)(1) 40 passenger configuration Series 100 and 200 (ref. FAA exemption No. 4723 dated October 24, 1986)

Compliance with the following additional optional requirements has been established:

Ice Protection - FAR 25.1419

Compliance with FAR 25.801 has been established when the safety equipment requirements of FAR 25.1411 and the ditching equipment requirements of FAR 25.1415 are satisfied.

#### Certification Basis

#### Series 400:

Federal Aviation Regulations (FAR) Part 25, Airworthiness Standards: Transport Category Airplanes, dated 01 February 1965, Amendments 25-1 through 25-83 Federal Aviation Regulations (FAR) Part 34, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, effective 10 September, 1990, including Amendment 34-3 effective February 3, 1999.

Federal Aviation Regulations (FAR) Part 36, effective 1 December, 1969, including Amendment 36-1 through 36-21.

## Additional Requirements:

Federal Aviation Regulations (FAR) Part 25, Airworthiness Standards: Transport Category Airplanes, dated 01 February 1965, Amendments 25-84 through 25-86, and 25-92.

#### <u>Items of Equivalent Safety:</u>

FAA Issue Paper F-1. "Use of 1-g Stall Speed Criteria Instead of Minimum Speed in the Stall"

#### **Special Condition:**

- 1. Special Condition No. 25-ANM-121, High Intensity Radiated Fields (HIRF)
- 2. Special Condition No. 25-154-SC, Automatic take-off power control system (ATPCS)

#### **Exemptions:**

- 1. Exemption No. 6790 to FAR 25.571(e)(1) "Damage Tolerance (Discrete Source) Evaluation at Amendment 25-72"
- 2. Exemption No. 6833 to FAR 36 Appendix C, Section C36.3©. "Definition of noise Sideline Point [compliance will be shown with ICAO Annex 16, Vol. 1, Iss. 3, Amendment 5, Chapter 3, Section 3.3.1(a)(2)]
- 3. Exemption No. 6864 to FAR 25.1435(b)(1) "Hydraulic System Test and Analysis, at Amendment 25-72"

#### **Optional Requirements:**

1. Ice Protection: FAR 25.1419

2. Ditching: Compliance with FAR 25.801 has been established when the safety requirements of FAR 25.1411 and the ditching equipment requirements of FAR 25.1415 are satisfied

#### Serial Numbers Eligible

Series 100

Serial number 2 and subsequent

Series 200

Serial number 391 and subsequent

Series 300

Serial number 100 and subsequent

Series 400

Serial 4001 and subsequent

## **Equipment**

The basic required equipment as prescribed in the applicable airworthiness requirements (See Certification Basis) must be installed in the aircraft.

### Approved Publications

Flight Manual

Series 100: PSM 1-81-1A (Models 101, 102, 103 and 106)

Series 200: PSM 1-82-1A (Model 201, 202)

Series 300: PSM 1-83-1A (Models 301, 311 and 315) Series 400: PSM 1-84-1A (Models 400, 401 and 402)

Airworthiness Limitations (Part 2) and MRB Report (Sections 2 and 3) of the

Maintenance Program Series 100: PSM 1-8-7 Series 200: PSM 1-82-7 Series 300: PSM 1-83-7

Maintenance Requirements Manual, MRM (Section 1, MRB report and Section

2, Airworthiness Limitation Items

Series 400: PSM 1-84-7

Definition Report AEROC 8.1.AC.1

## Service Information

Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

#### **Life Limited Parts**

Components which are life limited are listed in the "Airworthiness Limitations" section of the Maintenance Program. (See Note 3).

#### Note 1.

A current weight and balance report including list of equipment included in certificated empty weight, and loading instructions must be in each aircraft at the time of original certification and at all times there after except in the case of operators having an approved weight control system. The aircraft total system fuel must be included in the empty weight. System fuel is the amount of fuel required to fill the system plumbing and tanks to the undrainable level <u>plus</u> unusable fuel in the tanks established under FAR 25.959.

The aircraft must be loaded so that the C.G. is within specified limits at all times, considering fuel loading and usage, gear retraction, and movement of crew and passengers from their assigned positions.

Page 13 of 13 A13NM

- Note 2. The aircraft must be operated in accordance with the FAA Approved Airplane Flight Manual.
- Note 3. Compliance with the frequencies for "Threshold" and "Repeat" inspection specified in the "Airworthiness Limitations", Volume 1, Part 2 of the Maintenance Program (PSM 1-8-7, PSM 1-82-7 and PSM 1-83-7) and MRB report Volume 1, Part 1 of the same document, are required to ensure continuing compliance with the type certification basis. For Series 400, the "Threshold" and "Repeat" inspections are specified in Part 2 of the MRM (Airworthiness Limitations) and Part 1 of the MRM (MRB report).
- Note 4. For mixed passenger/cargo configurations see weight and balance manual.
- Note 5. Modifications required to convert a Model DHC-8-101 to a 102, a 102 to a 103, a 102/103 to a 106, and a 311 to a 315 are identified in Bombardier Definition Report AEROC 8.1.AC.1 listed in Approved Publications.
- Note 6. The DHC-8 Series 200 was certificated as a derivative of the Series 100 aircraft. The applicable basis of certification is the same as the Series 100, but the manufacturer elected to demonstrate compliance with FAR Part 25, up to Amendment 25-66, less the exceptions shown under the Series 200 Certification Basis.